

# TRANSMISSION LINE PARASITIC ELEMENT DISCONTINUITY CANCELATION

## ABSTRACT

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A discontinuity, such as a via, in a signal transmission line can introduce a parasitic element that affects the signal transmission. The method in accordance with the present invention is directed to counteracting the transmission line parasitic element discontinuity. The method includes determining the amount of parasitic capacitance or inductance that is introduced at a portion of the transmission line, such as by the via. A suitable amount of delay is introduced to the transmission line by way of correction impedance in order to counteract the affects of the parasitic element. The delay is calculated taking into account at least in part the correction impedance and the parasitic element effect. The correction impedance is suitably added to a portion of the transmission line at which the parasitic element is present.

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